

14 extending from an inlet end 16 of engine 10 aftward to an exhaust end 18 of engine 10.

a1  
Engine 10 includes a core engine 30 which includes a high pressure compressor 34, a combustor 36, a high pressure turbine 38, and a power turbine or a low pressure turbine 40, all arranged in a serial, axial flow relationship. Engine 10 also includes a bypass duct 42 surrounding the core engine 30. In alternative embodiments, engine 10 also includes a core fan assembly.

IN THE CLAIMS

Please cancel Claim 8.

6. (once amended) A pulse detonation system for a gas turbine engine, said pulse detonation system configured to create a temperature rise and a pressure rise within the gas turbine engine and to increase gas turbine engine thrust, said pulse detonation system comprising:

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at least one deflagration chamber radially outward from an engine exhaust centerbody;  
and

a detonation chamber in flow communication with said deflagration chamber, said detonation chamber configured to detonate a fuel mixture.

9. (once amended) A pulse detonation system in accordance with Claim 6 wherein said detonation chamber downstream from said deflagration chamber.

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10. (once amended) A pulse detonation system in accordance with Claim 6 further comprising a reversed flap configured to translate axially from a first position during a first engine operating mode to a second position during a second engine operating mode.

11. (once amended) A pulse detonation system in accordance with Claim 6 wherein said detonation chamber is semi-toroidal.

14. (once amended) A gas turbine engine comprising:

an inlet portion;

an exhaust portion positioned co-axially with said inlet portion;

a centerline axis of symmetry;

an exhaust centerbody concentrically aligned with said exhaust portion and extending axially along said centerline axis of symmetry into said exhaust portion; and

a pulse detonation system positioned between said inlet portion and said exhaust portion, said pulse detonation system configured to create a temperature rise and a pressure rise within said engine and to increase engine thrust, said pulse detonation system comprising:

at least one deflagration chamber radially outward from said engine exhaust centerbody; and

a detonation chamber downstream from and in flow communication with said at least one deflagration chamber, said detonation chamber configured to detonate a fuel-air mixture.

19. (once amended) A gas turbine engine in accordance with Claim 15 wherein said detonation chamber is semi-toroidal.

20. (once amended) A gas turbine engine in accordance with Claim 15 wherein said pulse detonation system further comprises a reversed flap configured to translate axially from a first position during a first engine operating mode to a second position during a second engine operating mode.